

(19)



JAPANESE PATENT OFFICE

PATENT ABSTRACTS OF JAPAN

(11) Publication number: **57044755 A**(43) Date of publication of application: **13.03.82**

(51) Int. Cl

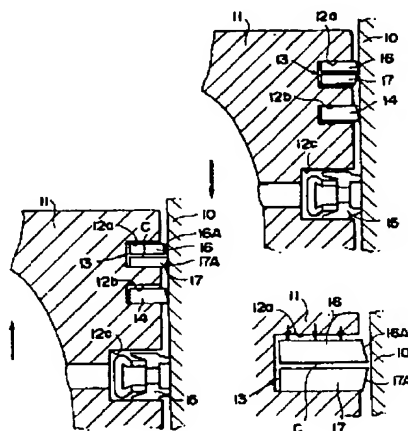
F02F 5/00
F02F 3/00
(21) Application number: **56082146**(71) Applicant: **NISSAN MOTOR CO LTD**(22) Date of filing: **29.05.81**(72) Inventor: **AOYAMA SHUNICHI**(54) **PISTON OF INTERNAL ENGINE**

COPYRIGHT: (C)1982,JPO&Japio

(57) Abstract:

PURPOSE: To reduce the frictional loss around the upper and lower dead points, by combining two piston rings in such a manner that the outer diameters of the peripheral tapered surfaces of the piston rings are reduced from the adjacent parts toward the outsides.

CONSTITUTION: A ring group 12a is formed in the circumference of the piston 11, and the piston rings 16, 17 having approximately the same shape are arranged one over the other and mounted thereon. The piston ring 16, 17 have the tapered surfaces 16A, 17A with the diameters reduced from the adjacent parts toward the outsides, and there are spaces between the piston rings 16, 17 and the ring group 12a to allow the piston rings 16, 17 to move vertically and horizontally in the ring group 12a. During upward and downward strokes of the piston 11, the piston rings 16, 17 retain a lubricant oil in a space C by wedging effect, and at the upper and lower dead points they push the oil toward the cylinder wall 10 to form an oil film thereon, and thus the lowering of the output can be prevented.


BEST AVAILABLE COPY